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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/068,183 | 02/06/2002 | Xiaomin Ma | 180/138 | 8061 |

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EXAMINER

TRAN, CONGVAN

ART UNIT

PAPER NUMBER

2683

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,183

Applicant(s)

MA ET AL.

Examiner

CongVan Tran

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 9, 13-15, 19, 22, 26-32, 35, 37, 40-42, 47 and 48 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 6-8, 10-12, 16-18, 20, 21, 23-25, 33, 34, 36, 38 and 43-46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: In claim 1, line 12 "if a free channel" should be changed to --if the free channel--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 5, 9, 15, 19, 22, 26-29, 31 40-42, and 47-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Fapojuwu (5,937,353).

Regarding claims 1, 5, 9, 15, Fapojuwu discloses a method and apparatus for controlling allocation of traffic channels comprising: (a) constructing a channel convertible set including communication channels for active mobile stations moving in a direction away from the first base station (see abstract, fig.1-2, col.1, line 60-col.2, line 14 and its description); (b) receiving a handoff request from a requesting mobile station having a communication link with the second base station (see fig.1-2, elements 1, 20, 26, and its description); (c) determining whether a free channel is available for the handoff request (see abstract, fig.3,-4, blocks 64, 78 and its description); and (d) if a free channel is not available for the handoff request, allocating one of the

communication channels in the channel convertible set to the handoff request (see abstract, fig.3-4, blocks 78, 84, 86 and its description).

Regarding claims 2, 31 Fapojuwo further discloses wherein constructing a channel convertible set includes determining whether the active mobile stations are moving in a direction away from the first base station (see abstract, col.1, line 60-col.2, line 14).

Regarding claims 19, 22, 26-29, 40-42, 47-48, Fapojuwo discloses a method and apparatus for controlling allocation of traffic channels comprising: (a) estimating the mobility of the first mobile station with respect to the first base station (see abstract, col.1, line 60-col.2, line 14); (b) receiving a handoff request from the second mobile station (see abstract, fig.1-2, elements 1, 20, 26, and its description); and (c) in response to determining that the first mobile station is moving in a direction away from the first base station, converting the communication channel from the first mobile station to the second mobile station (see abstract, fig.3-4, blocks 78, 84, 86 and its description).

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 32, 35, and 37, are rejected under 35 U.S.C. 102(e) as being anticipated by Yang et al. (2001/0033600). 1, 2, 5, 9, 15, 19, 22, 26-29, 31 40-42, and 47-48

Regarding claims 32, 35, 37, Yang discloses a sectorized smart antenna system and method, comprising: (a) receiving a signal including an indication of signal strength between the first base station and the mobile station (see fig.2, element 202, page paragraph [0048]; (b) determining whether the signal strength changes over a period of time (see fig.2, paragraph [0049] and its description); and (c) if the signal strength changes over the period of time, determining that the mobile station is moving in a direction with respect to the first base station (see fig.2, paragraphs [0010], [0049] and its description).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13-14, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fapojuwu (5,937,353).

Regarding claim 13-14, 30, Fapojuwu discloses all the subject matter described in rejected claim 1, except for using CDMA transmission technique and soft handoff, However, CDMA is well-known technique. Thus, it is obvious to one skill in the art to use CDMA technique in order to provide quality signal in soft hand off for improve the quality of telecommunications system.

Allowable Subject Matter

7. Claims 3-4, 6-8, 10-12, 16-18, 20-21, 23-25, 33-34, 36, 38, and 43-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CongVan Tran whose telephone number is 571-272-7871. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CONGVAN TRAN
PRIMARY EXAMINER

CongVan Tran
Primary Examiner
Art Unit 2683

Jun. 23, 2005.